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EXAMINER

BAYOU, AMENE SETEGNE

ART UNIT

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3746

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,106	Applicant(s) REARDON, ANGUS	
	Examiner AMENE S. BAYOU	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,8,10-15,18,20,22,23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-30 is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8,10-15,18,20,22,23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 11/24/10 has been entered.

Claim Objections

2. Claims 7 and 25 are objected to because both depend on canceled claims. For purpose of examination claims 7 and 25 are considered to be dependent on claims 1 and 23 respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,2,,7,11-13,15,18,20,22,26,27 are rejected under 35 U.S.C 103(a) as being unpatentable over Shotmeyer (3908690) in view of Koyama (4966522).

5. In re claim 1 Shotmeyer discloses a device for collecting water including:

- **An apparatus (figure 1)** for attachment to an inlet end of **a conduit (32)** in fluid communication with **a remote pump (36)** for removing liquid from **a pool of liquid (16)** , the apparatus comprising a substantially spheroidal or ovoidal shaped sections that mount about the inlet end of the **conduit (32)** ,the sections forming a **hollow body (10)**having a substantially elliptical cross-section ; wherein the **hollow body (10)** freely sinks in a **pool of liquid (16)** to rest on an underlying surface of the pool of liquid ;and wherein the sections form **at least one opening (the opening connecting to the tube 32)** in a generally horizontal plane allowing liquid to ingress from **the pool (16)** to the interior of the **hollow body (10)** and the inlet of **the conduit (32)**. Shotmeyer does not disclose that the hollow body is formed of a pair of sections. But Koyama teach a similar liquid intake apparatus in which the hollow body (4b) is formed of a pair of sections (see figure 2).It would have been obvious to one skilled in the art at the time the invention was made to have made the hollow body of Shotmeyer from two components as taught by Koyama for ease of assembly and also accessibility when required. In addition please note that it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlicnrnan*, 168 USPQ 177, 179. In addition please note that since Shotmeyer in figure 1 and 2 clearly discloses more than one opening about the major diameter making it a single opening covering the

Art Unit: 3746

majority of the diameter merely depends on one's design choice and required flow rate.

In re claim 2 Shotmeyer as modified by Koyama discloses that the single opening **(the opening connecting to the tube 32)** is located at a circumferential portion of mid section of the hollow body **(figure 1)**.

In re claim 7 Shotmeyer as modified discloses the claimed invention since Shotmeyer discloses the opening **(the opening connecting to the tube 32)** is adjustable in width (by varying the dimension of the opening based on the required flow rate for example). In addition please note that it has been held that the provision of adjustability, where needed, involves routine skill in the art. In re Stevens, *101 USPQ 284 (CCPA 1954)*.

In re claim 11 Shotmeyer in view of Koyama as applied to claim 1 discloses the claimed invention since Shotmeyer that the hollow body (10) has a retaining means (the point of attachment holding the tube 32 is an integral part of 10) which in use retains the inlet for the conduit (32) within the hollow body (10).

In re claim 12 Shotmeyer in view of Koyama as applied to claim 11 discloses the claimed invention:

Koyama discloses:

Art Unit: 3746

- The retaining means is a **plurality of upright rods (4c)** attached to an internal surface of the **hollow body (4b)** , in **figure 2**. It would have been obvious to one skilled in the art at the time the invention was made to have attached plurality of rods to the hollow body of Shotmeyer as taught by Koyama to reinforce the internal body and prevent structural damage (clearly stated by Koyama in column 1, lines 20-22)

In re claim 13 Shotmeyer in view of Koyama as applied to claim 11 discloses the claimed invention:

Koyama teaches:

- The retaining means is a **plurality of peripheral ribs (4c)** extending from internal surfaces of the pair of sections of the **hollow body (4b)** surrounding the pump inlet in use. Please note that items 4c can be considered as ribs as well. See obviousness in claim 12 above. In addition since Koyama teaches a plurality of ribs from one section of the hollow body putting the same rib structure to the second internal surface of the hollow body involves duplication of parts for the same intended purpose (to provide extra rigidity) and such step would have been obvious to the skilled artisan.

In re claim 15 Shotmeyer in view of Koyama as applied to claim 1 discloses the claimed invention since Shotmeyer in figure 1 clearly show that the apparatus includes the pump inlet (which is the connection to pump 36).

In re claim 18 Shotmeyer discloses that the **inlet conduit (32)** is **a hose** and provides fluid communication between the pump inlet and the remote **pump (36)**.

In re claim 20 Shotmeyer discloses that the apparatus comprises **a remote pump (36)** located on **dry land (20)**.

In re claim 22 Shotmeyer in view of Koyama discloses the claimed invention:

Koyama teaches:

- The pump inlet is protected by a strainer or gauze (4b) to prevent particulate matter entering the pump inlet (4), in figure 2. It would have been obvious to one skilled in the art at the time the invention was made to have provided a strainer to the pump inlet of Shotmeyer as taught by Koyama in order to prevent particulate matter from entering the pump.

In re claim 26 and 27 Shotmeyer in view of Koyama discloses the claimed invention since Shotmeyer's apparatus comprises a pivotal connector on the hollow body for use with the conduit such that the hollow body automatically orients itself (**hollow body 10** is much longer in the horizontal than the vertical direction and thus it orients in the horizontal manner as shown in figure 1) as it sinks to lie flat on the underlying surface of the pool of the liquid and the elliptical cross-section (inherently) causes the hollow body to automatically orient itself

Art Unit: 3746

when in contact with the underlying surface of the pool of liquid such that the at least one opening lies generally parallel with the underlying surface.

6. Claims 8 and 10 are rejected under 35 U.S.C 103(a) as being unpatentable over Shotmeyer (3908690) in view of Koyama (4966522) as applied to claim 1 further in view of Dunmire (2950930).

In re claim 8 Shotmeyer in view of Koyama disclose the claimed invention except mentioning that the apparatus comprises a pair of corresponding sleeves on the pair of sections and a fastener for use with the pair of sections such that the pair of sections are releasably attached to each other. But Dunmire teach a method of coupling fluid conduits including:

- **A pair of corresponding sleeves (40, 41; figure 2)**, each sleeve oriented on one of the **pair of sections (14, 15)**, and **a fastener (43)** for use with the **pair of sections (14, 15)** such that the pair of sections are releasably attached to each other. It would have been obvious to one skilled in the art at the time the invention was made to have made the modified fluid conduit of Shotmeyer in pairs such that they are releasably attached to each other as taught by Dunmire for ease of access when needed and also for ease of maintenance and assembly.

In re claim 10 Shotmeyer in view of Koyama further in view of Dunmire as applied to claim 8 disclose the claimed invention since Dunmire's one section of the **pair of sections (14, 15)** is hingedly attached to the other pair of sections at

Art Unit: 3746

adjacent respective ends of each of the sections (the connection at each end when taken separately can be considered as hinged connection since there will be free rotation until the second end is screwed).

7. Claim 14 is rejected under 35 U.S.C 103(a) as being unpatentable over Shotmeyer (3908690) in view of Koyama (4966522) as applied to claim 1 further in view of Hagan (5108591).

8. In Claim 14 Shotmeyer in view of Koyama as applied to claim 1 disclose the claimed invention except stating that the hollow body is attached to a tether. But Hagan teaches a similar oil recovery apparatus including:

- A hollow body that is provided with an attachment for attaching **a tether (18)**, in figure 1. It would have been obvious to one skilled in the art at the time the invention was made to provide a tether to the oil collecting apparatus of the modified device of Shotmeyer as taught by Hagan in order to provide more stability to the intake structure.

9. Claims 23 and 25 are rejected under 35 U.S.C 103(a) as being unpatentable over Breslin (5474685) in view of Strauss (4243529) further in view of Sloam (4789307).

10. In re claim 23 Breslin disclose a method for recovering immiscible liquids including:

- A submersible apparatus (90, 97), in figure 1 and 4, for removing liquid (20) from a pool of water (22) using an external pump (88) and an inlet

Art Unit: 3746

conduit (84), in figure 2. Breslin, however fails to disclose that the submersible apparatus has a pair of arcuate sections .But Strauss teaches a similar submersible apparatus including:

- A pair of arcuate sections (52,54) that when in use mount about an inlet conduit (56,16) for a pump (28) to form a hollow body (52,54),the pair of sections (52,54) forming at least one opening (56) located along the junction between the pair of sections (52,54) for a majority of the outer perimeter of the hollow body (52,54),allowing liquid to flow radially into the hollow body, in figure 1. Breslin in view of Strauss fails to disclose that the arcuate sections are joined by hinged connection. But Sloam teaches an oil recovery device including :
 - One section (12 or 13) of the pair of sections (12 and 13) is hingedly attached (at 14) to the other section of the pair of sections, in figure 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the submersible apparatus of Breslin by making it in the form of two arcuate sections as taught by Strauss in order to reduce drag .Also It would have been obvious to one skilled in the art at the time the invention was made modify the oil collecting apparatus of Breslin and Strauss by connecting the pair of sections using a hinged joint as taught by Sloam for ease of opening and closing and get a faster access to the components inside the collector.

Art Unit: 3746

11. In re claim 25 Breslin in view of Strauss further in view of Sloam as applied to claim 23 disclose the claimed invention:

Strauss discloses:

- The width of at least one opening (the opening between the sections 52, 54) is adjustable in width (by varying the dimension of 82), in figure 1. In addition please note that it has been held that the provision of adjustability, where needed, involves routine skill in the art. In re Stevens, *101 USPQ 284 (CCPA 1954)*.

Allowable Subject Matter

12. Claims 28-30 are allowed.

Response to Arguments

13. Applicant's arguments with respect to claims 1-27 have been considered but are not persuasive.

14. In re claim 1 Applicant on page 1 argued that Shotmeyer's perforations 30 are smaller than particulate matter 44, and therefore teaches away from a "single elongate opening " as required by amended claim 1.

Responding to Applicant's argument:

Although Shotmeyer states that the perforation 42 should be smaller than the particulate matter 44 diameter Shotmeyer in column 5, lines 16-20 also stated that such perforations can be distributed on the wall surface as desired.

Therefore making a single elongate opening (a special case in which one

Art Unit: 3746

perforation touches the next neighbor) is by no means a teaching away from the intended invention. Even if two neighboring holes are joined together side by side to make one elongate path ,the diameter (or the vertical dimension of the hole) can still be maintained the same. Only the axial length of the holes is changed. Therefore ,since the particulate matter still has a larger diameter than the conjoined holes it will remain inside the chamber..

In re claim 12 Applicant on page 2 paragraph 5 argued that Koyama does not teach a plurality of upright rods and asserted that the element 4c is a protector of the screen from collapsing.

Responding to Applicant's argument:

Claim 12 which has all the limitation of claim 11 requires that the hollow body has retaining means to retain the inlet for the conduit and that such retaining means is a plurality of rods attached to the internal surface of the hollow body. As can be seen in figure 1 and as clearly stated in column 1,lines 19-21 ,the protector 4c (which are vertical rods attached to the internal surface of the hollow body) prevents the collapse of the screen 4b (which is simply an inlet to the conduit 4a).Therefore the protector 4c can correctly be considered as a retaining means of the inlet for the conduit.

In re claim 13 Applicant on page 3,pargraph 1 argued that both Shotmeyer and Koyama do not teach ribs. Applicant further argued that the protector 4c of

Koyama does not extend from internal surfaces of the pair of sections as required by the amended claim 13.

Responding to Applicant's argument:

In the previous paragraph Examiner has already discussed that Koyama teaches rib structure. Regarding the amended claim limitation please refer to the discussion given under the claim 13 rejection paragraph above.

In re claim 23 Applicant on page 5 paragraph 1 argued that modifying the apparatus of Breslin by the arcuate sections of Strauss and the hinge structure of Sloan would render the prior art invention being modified unsatisfactory for its intended purpose. Applicant asserted that the hinges of Sloan do not provide for an opening between the two sections and using the hinge with the sections of Strauss would not provide for a compression fit on the cartridge 56.

Responding to Applicant's argument:

The modification of Breslin's recovery unit 97 by the teaching of Strauss merely involves changing the shape into an elliptical (spherical) one. An modifying the modified inlet structure of Breslin by Strauss involves introducing a hinge to such elliptical inlet to facilitate the opening of the top and bottom parts. Examiner is not convinced that such modification would render the operation Breslin's device unsatisfactory for its purpose.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amene S. Bayou whose telephone number is

Art Unit: 3746

571-270-3214. The examiner can normally be reached on Monday-Thursday,
9:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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